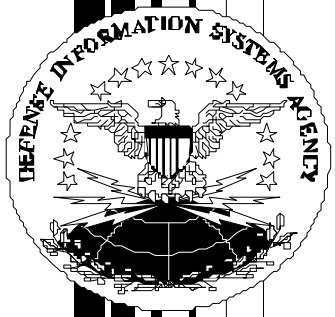

DEFENSE INFORMATION SYSTEMS AGENCY

JOINT INTEROPERABILITY TEST COMMAND
FORT HUACHUCA, ARIZONA

GLOBAL COMMAND AND CONTROL SYSTEM (GCCS) 3.0 OPERATIONAL TEST AND EVALUATION PLAN

(DRAFT)

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(DRAFT)

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EXECUTIVE SUMMARY

The Defense Information Systems Agency (DISA) is developing the Global Command and Control System (GCCS) in response to guidance from the Chairman, Joint Chiefs of Staff, to standardize command and control systems. The Joint Staff J-3 declared GCCS version 2.1 the Department of Defense (DoD) Command and Control System of Record in August 1996, and GCCS replaced the World Wide Military Command and Control System (WWMCCS). Several system updates have been fielded since that time.

Version 3.0 is the next major release of GCCS. This version will:

- Replace the GCCS Common Operating Environment (COE) with the Defense Information Infrastructure (DII) COE
    - Upgrade the GCCS operating systems
    - Upgrade the GCCS database management system
- Add limited new functionality and fix selected previously identified problems

The Joint Interoperability Test Command (JITC) will conduct a three-stage operational test and evaluation of the GCCS version 3.0. The stages will be performed in parallel in some areas, causing an overlap. The three stages are:

Stage 1, Transition. This test will occur at multiple operational sites. Actual site support personnel (for example, system administrators, database administrators, and security personnel) will install and configure the system, establish network connectivity, establish security controls, and otherwise prepare the system for operational use. This test will also determine whether GCCS will remain compatible and operational throughout the transition to GCCS version 3.0.

Stage 2, Supportability. JITC will assess the adequacy of GCCS user documentation, training, and support.

Stage 3, Simulated crisis situation. This test will occur at multiple operational sites including land based, afloat headquarters, and an austere environment. Actual user personnel will use GCCS to support joint planning and execution, intelligence, and other functions in the context of a simulated crisis exercise.

JITC will supplement the operational evaluation with results from developmental test and evaluation.

The evaluation will determine the operational effectiveness and operational suitability of

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TABLE OF CONTENTS

Paragraph Page

APPENDICES

Appendix Page

TABLE OF CONTENTS (continued)

LIST OF FIGURES

LIST OF TABLES

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SECTION I - INTRODUCTION

I-1 BACKGROUND

a. The Global Command and Control System (GCCS) is a worldwide automated information system designed to support the Joint Chiefs of Staff (JCS) and Commanders-in-Chief (CINCs) in deliberate and crisis planning with the use of an integrated set of analytic tools and flexible data transfer capabilities.

b. The JCS declared version 2.1 as the DoD Command and Control (C2) System of Record (SOR) in August 1996. In December 1996, version 2.2 was fielded as a replacement for version 2.1. In April 1997, a limited user assessment on GCCS version 2.2.1 was performed, and the JCS accepted GCCS version 2.2.1 as an upgrade to version 2.2. GCCS version 2.2.2 was fielded in July 1997, and has now replaced GCCS version 2.2.1 as the current C2 System.

c. GCCS version 3.0 will run on three platforms; Solaris, Hewlett Packard, and Windows NT 4.0. GCCS version 3.0 is being developed as the next major software release to:

- Replace the GCCS Common Operating Environment (COE) with the Defense Information Infrastructure (DII) COE
    - Upgrade the GCCS operating systems
    - Upgrade the GCCS database management system.
- Add limited new functionality and fix selected previously identified problems.

GCCS 3.0 stage 2, increment I and GCCS 3.0 stage 2, increment II will provide new functionality to include these areas:

- Modernized Integrated database Intelligence product
- Archive/Intelligence product library for GCCS (MIGDB) access and display (renamed to TC4I)
- Imagery Product Library (IPL) access and display
- Joint Operations Planning and Execution System (JOPES)
- Joint Forces Requirements Generator (JFRG)
- Force Employment AF Option 4
- System Tools / Security
- Common Operational Picture (COP)
- Tactical Meteorological and Oceanographic (METOC) capability

d. Figure I-1 identifies the GCCS network sites.

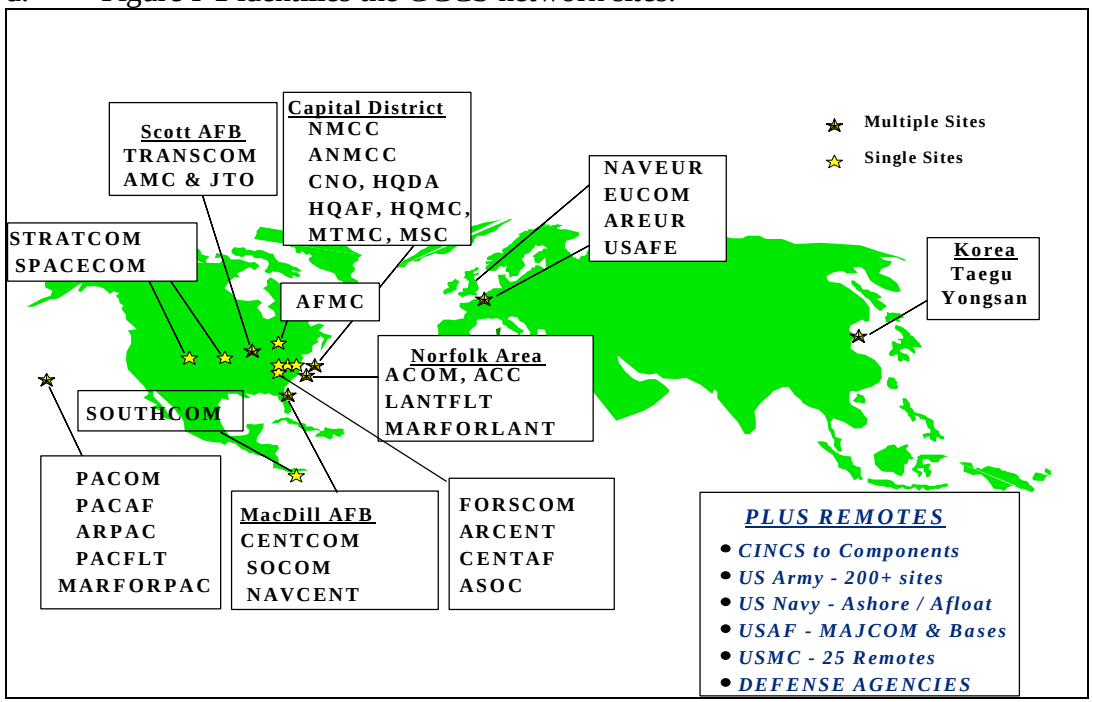
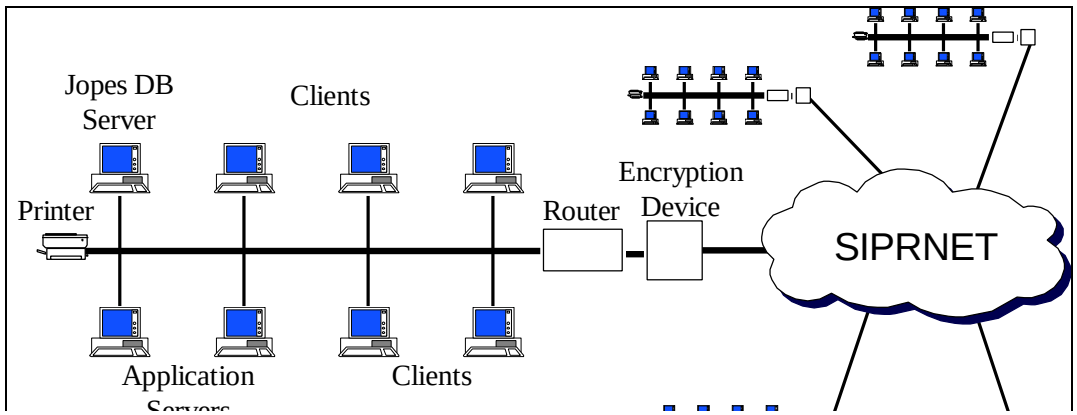


Figure I-1. GCCS Network Sites

e. Figure I-2 shows a typical site configuration.



I-2 PURPOSE. To determine the operational effectiveness and operational suitability of GCCS version 3.0 in support of a Joint Staff J-3 decision concerning declaration of version 3.0 as the DoD Command and Control (C2) System of Record (SOR.)

I-3 SCOPE

I-3.1 Overview. The approach for Operational Test (OT) is based on an incremental testing concept. The Program Management Office (PMO) and Joint Staff have decided on an incremental release of the version 3.0 functionality. JITC will conduct risk assessments to determine the required level of OT for subsequent stages. (See Table I-1.) The test approach will remain the same for subsequent increments, but will be tailored as required by the risk assessments. (See Figure I-3.)

Table I-1. Level of OT for Each Increment

Software Release	Simulated Crisis Situation	Transition Test	Assessments		
			Training	Documentation	User Support
Baseline OT&E	◄——— (Full OT) ———►				
Increment I	New functionality	Minimal	New functionality	New functionality	None
	Plus as required by risk analysis				
Increment II	New functionality	Minimal	New functionality	New functionality	None
	Plus as required by risk analysis				

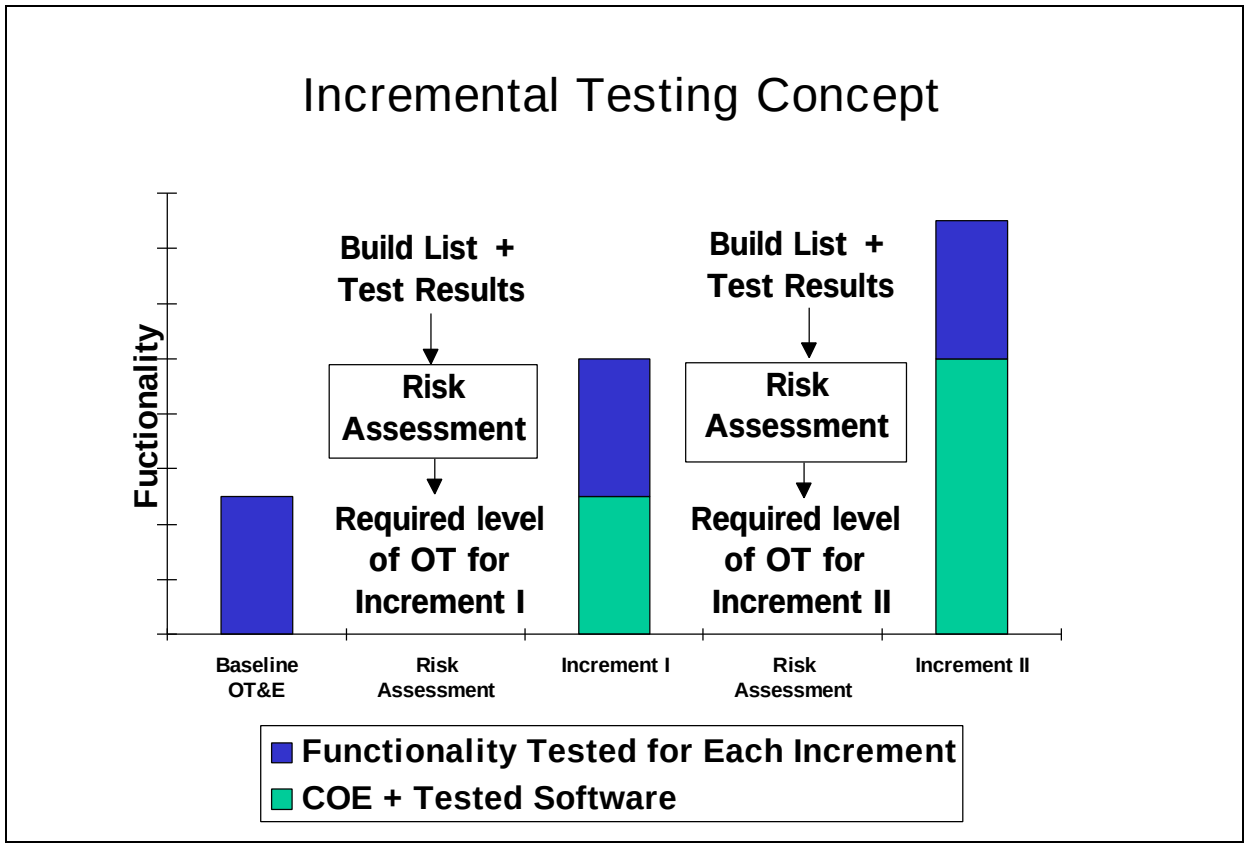


Figure I-3. Incremental Testing Concept

a. Test stages. The JITC will conduct GCCS version 3.0 Operational Test and Evaluation (OT&E) in three stages and will be supported by data from MDT. The three stages shown in Figure I-4, which may overlap, are:

OT Stage 1, Transition Test. This test has two objectives:

1) Compatibility. To determine if the system can be operated effectively during the transition from version 2.2 to version 3.0.

2) Installation. To determine if site personnel can install and configure the system and perform all necessary tasks to prepare the system for effective operation.

This stage will occur at European Command (EUCOM), AND Pacific Command (PACOM.)

which deficiencies previously observed in training, documentation, and user support (for example, help desk support) have been corrected. Functional user support activities will be evaluated as they currently exist for GCCS version 2.2. Functional user and technical training programs established for version 3.0 at JOPES Training Office (JTO) and AETC will be evaluated. Version 3.0 functional user documentation will be evaluated. System technical documentation provided by DISA to C/S/A system administrators will be evaluated.

OT Stage 3, Simulated Crisis Situation. The objective of this test is assess GCCS effectiveness and suitability in sustained operations. Actual users at the following operational sites will use GCCS to support crisis action planning and execution.

- Atlantic Command (ACOM), the supported CINC at Norfolk, Virginia
- Central Command (CENTCOM) at Mac Dill AFB, Florida
- Forces Command (FORSCOM) at Atlanta, Georgia
- Joint Interoperability Test Command (JITC) at Ft. Huachuca, Arizona
- Special Operations Command (SOCOM) at Mac Dill AFB, Florida
- Transportation Command (TRANSCOM) at St. Louis, Missouri

ACOM, the supported CINC will select an OPLAN to use for test purposes. The plan will be sufficiently robust to exercise a broad representative sample of GCCS functions as identified in the RID (for example, JOPES, COP, intelligence, SORTS, and miscellaneous functions.) SMEs will evaluate the success of tasks performed by site personnel.

Functionally, the sites will represent a supported CINC, one or more supporting CINCs, the JITC acting as the surrogate for the National Military Command Center (NMCC), a Joint Task Force (JTF) headquarters including an austere environment, and possibly an afloat headquarters. Actual users will operate the system at all sites (including any lab sites). The GCCS user community will provide SMEs to support assessment of Mission Task success.

JITC will supplement the operational evaluation with data from the three stages of the modified developmental test and evaluation (MDT&E).

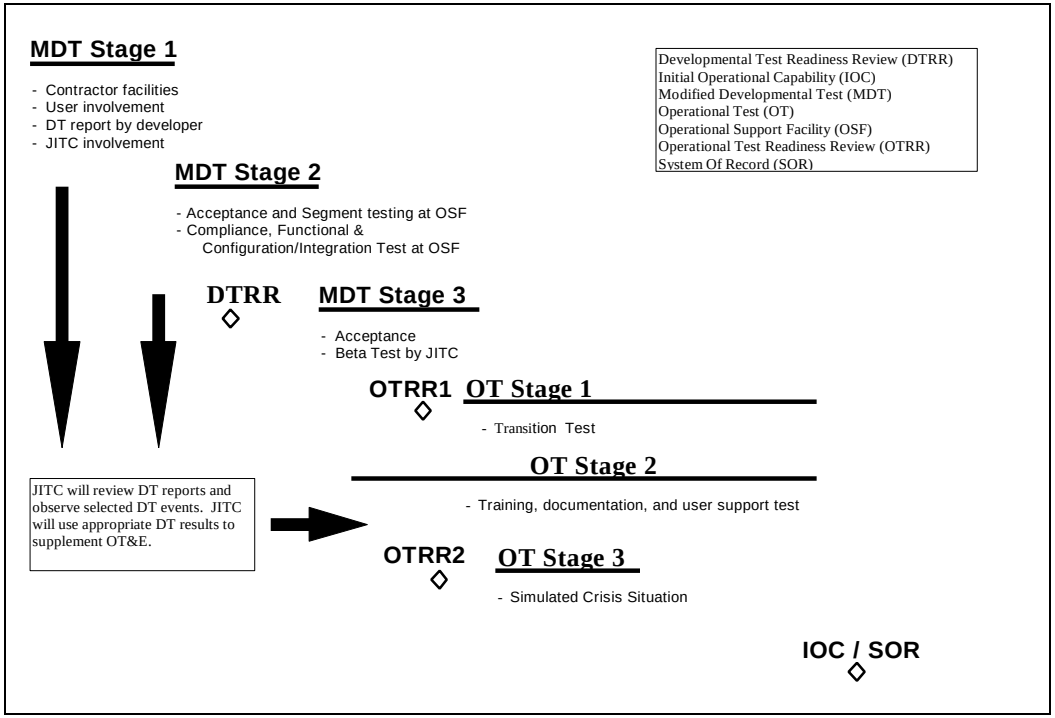


Figure I-4. Version 3.0 Test Stages

b. Approach. The OT&E will address the following critical operational issues (COI) as identified in the Test and Evaluation Master Plan (TEMP).

Operational Effectiveness.
- COI 1. Mission performance
- COI 2. Interoperability
- COI 3. Security

Operational Suitability.
- COI 4. Mission Support
- COI 5. Supportability

Each COI has associated criteria. JITC will consider the criteria to be objectives, with security being the only pass/fail threshold. JITC will resolve the issues based on the operational impact of any shortfalls, not based on a strict comparison of performance to the thresholds.

· significant impact: users are unable to accomplish some mission tasks/mission support tasks.

JITC will resolve the COI favorably if the impact is minimal or moderate. If the impact is significant, JITC will resolve the COI unfavorably.

c. Subject Matter Experts (SMEs.) The user community will provide SMEs to support the test. SMEs will assess the success of each Mission Task and Mission Support Task. For Mission Tasks, the SME is a GCCS user at the test sight (for example, a staff officer who uses the GCCS products to support mission accomplishment); in general, the Mission Task SME will not be the workstation operator who performs the task. For Mission Support Tasks, the SME is a member of the site GCCS team who is sufficiently knowledgeable in the task being performed to make an assessment (for example, system administrator or database administrator); the Mission Support Task SME may be the person who performs the task.

d. Configuration Control. The system configuration will be established at the start of the MDT Stage 3 and will not be changed during OT except as determined necessary by the adjudication process (see paragraph 2.3a in the TEMP) to support test operations. It may be necessary (and desirable) to make configuration changes between the completion of MDT Stage 3 and the start of OT. The GCCS PMO will coordinate with the JITC prior to making such changes. The system configuration will be re-established at the start OT and will not be changed except as determined necessary by the adjudication process to support test operations.

e. Joint Interoperability. The Joint Interoperability Test Command (JITC) is required by DODI 4630.8 and Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 6212.01A to certify C4I systems for interoperability with systems with which they have a requirement to exchange information. At the end of Operational Test and Evaluation (OT&E), JITC must certify Joint interoperability. JITC will review GCCS test plans and procedures to ensure that the data to be collected meet the JITC requirements. JITC will monitor interoperability requirements during various GCCS tests and use the data to evaluate system interoperability.

g. Test periods. The OT is tentatively scheduled to start 5 January 1998.

I-3.2 Limitations

TBD

SECTION II - DETAILS OF TEST

II-1 PERFORMANCE

II-1.1 Issue 1. Does GCCS 3.0 support warfighters in accomplishing deliberate and crisis action planning and execution in an operational environment?

This COI will be evaluated on the basis of Mission Task success in a simulated crisis situation.

II-1.2 Criteria

a. Joint Operations Planning and Execution System Functional Ability. GCCS 3.0 must support JOPES functions. (Source: Requirements Implementation Document (RID) paragraph 3.a)

b. Common Operational Picture (COP). GCCS 3.0 must support development and presentation of the COP and/or the subset Common Tactical Picture. (Source: RID paragraph 3.b)

c. Intelligence Functions. GCCS 3.0 must support access to Intelligence functions such as the National Imagery and Mapping Agency's Imagery Product Libraries, the Modernized Integrated Databases, and COLISEUM. (Source: RID paragraph 3.c)

d. Status of Resources and Training System (SORTS). GCCS 3.0 must support access to SORTS data. (Source: RID paragraph 3.d)

e. Planning Databases. GCCS 3.0 must support access to Airfields, and EVAC. (Source: TEMP paragraph 4.4.4)

f. Miscellaneous Requirements Functions. GCCS must support specified functions (Source: RID paragraph 3.e): Command, Control, Communications, Computer and Intelligence (C4I) Interoperability database, FOCAL POINT capability using Secret Agent software, improved security tools, DII/COE, NETSCAPE COMMUNICATOR web browser, Solaris 2.5.1 and HP/UX 10.20 operating system upgrades, and communications (for example, teleconferencing, TELNET, e-mail, FTP.)

(2) Task Name

(3) Date/Time

(4) SME assessment of mission task success

(5) SME detailed comments on the anomalies of non-successful performance of the task.

b. Supplemental Data

(1) Test Incident Reports (TIRs)

(2) Method used to connect user terminal to GCCS (Local Area Network (LAN) direct or remote) and data speed if remote

(3) Test Conduct Log forms

(4) Daily Emerging Results Report.

II-1.3.2 Test Procedures

a. Test Conduct. Operational personnel at GCCS test sites will operate and maintain the system in a simulated crisis situation using a designated Operations Plan (OPLAN.) Test sites will include ACOM, CENTCOM, FORSCOM, SOCOM, and TRANSCOM. JITC will provide a test conductor at each site. Site personnel will use GCCS to perform joint planning, execution functions, and COP functions. COP functionality will be focused on at CENTCOM. An operational assessment of the MIG functionality for GCCS stage 2 will be conducted concurrently at CENTCOM. Site personnel assigned to perform the test exercise will use the Mission Task list identified in Appendix K.

b. Data Collection

(1) An SME will observe and determine the success of GCCS 3.0 Mission Tasks based on the timeliness, accuracy, completeness, relevance, and usefulness of the task.

(2) JITC OT&E test personnel, SMEs, and operational site personnel will

· Unsuccessful - No product, product cannot be used by the intended recipient for the intended purpose, or the product is too late or inaccurate to support the mission.

· Marginally Successful - Product is accurate and timely, but requires workarounds to produce, or the intended recipient must use workarounds to produce the product.

· Fully Successful - Product is sufficiently timely, accurate, complete, and useful. Fully supports mission accomplishment by the intended recipient.

Reference Figure II-1-1. There is no threshold for the percentage of success. The

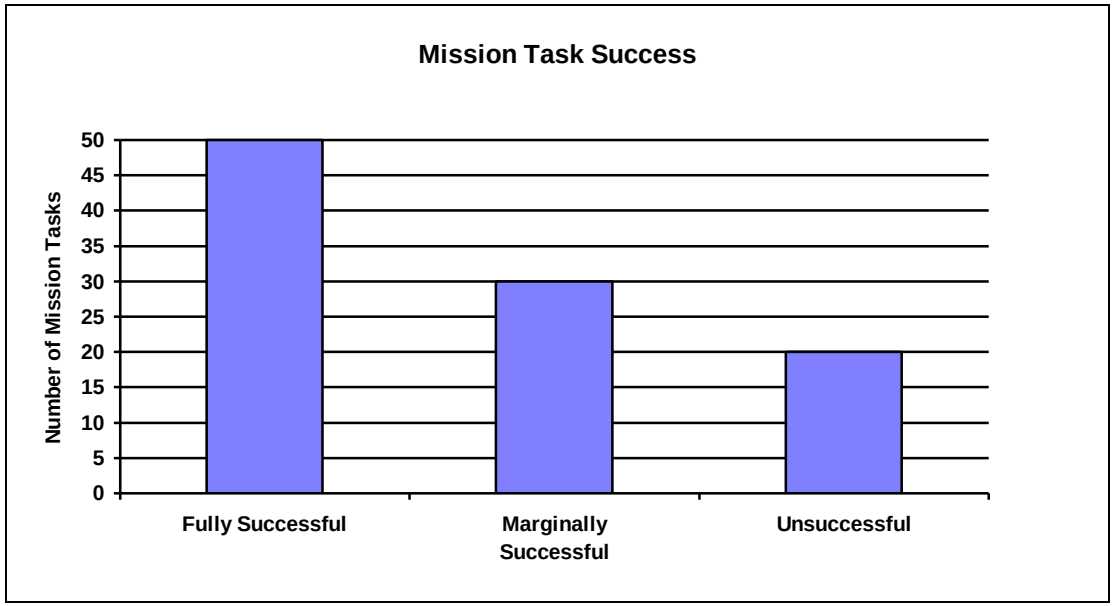


Figure II-1-1. Assessment of Mission Task Success of GCCS Version 3.0

JITC will assess operational impact of the observed anomalies and provide a narrative summary of SME statements regarding deficiencies, suggested improvements, or other comments.

b. The JITC OT&E testers will review all Test Conduct Logs, Daily Emerging Results Reports, and TIRs related to GCCS actions to identify any problems. If any are found, JITC will report them. The JITC will group qualitative comments concerning the ability of GCCS 3.0 to support mission tasks based on the percentage of success and failure for each task and report

c. compare SME responses and TIR results to arrive an overall evaluation. If the evaluation indicates that GCCS 3.0 does not provide warfighters and their staffs with the capability to support the requirements of deliberate and crisis action planning, the evaluation team will review the results by site in an attempt to determine causality.

d. review user comments for areas receiving low ratings to determine overall impact on site operations. The JITC will highlight each potential show stopper for decision authority.

II-1.3.5 Issue Resolution. Based on operational impact of shortfalls, JITC will resolve the performance issue.

II-2 INTEROPERABILITY

II-2.1 Issue 2. Does the GCCS support the effective exchange of information required to plan and execute missions?

The evaluation of GCCS Interoperability will be based upon its ability to interoperate with other DoD systems.

II-2.2 Criterion. The GCCS will interoperate with the systems in Table II-2-1.

Table II-2-1. GCCS Interfaces to Other Systems

INTERFACE SYSTEM	DATA TRANSFER DIRECTION	
	SEND	RECEIVE
AMHS / AUTODIN	X	X
COLISEUM	X	X
COMPASS	X	X
COMPES	X	X
COP Track Feeds (TIBS, TADIL B, EPLRS)	X	
GCCS(T)	X	X
GTN	X	X
JFRG/MAGTF II	X	X
MIDB	X	X
NIMA's IPL	X	X
RUDRS	X	X
SORTS	X	
TRAP	X	

II-2.3 Assessment. The JITC GCCS Interoperability Assessment Plan (published separately) identifies data requirements, test procedures, and analysis methodology. Test procedures in this document, paragraph II-1.3.2, will support the Interoperability Assessment.

II-3 SECURITY

II-3.1 Issue 3. Does GCCS version 3.0 architecture provide the necessary security precautions to protect military operations and national objectives supported by the GCCS?

This issue will address the capability of GCCS to provide safeguards against unauthorized access while ensuring authorized users have access to necessary information.

II-3.2 Criteria

a. The GCCS shall be accredited to operate at the system high SECRET level.

b. The GCCS implementation and operating procedures shall safeguard information from unauthorized access, manipulation, or retrieval. Safeguards will be established not only for classified defense information but for information designated by a warfighter as "close-hold" or "limited distribution."

II-3.3 MOP 3-1. System accreditation. The GCCS shall be accredited to operate at the system high SECRET level.

II-3.3.1 Data Requirements. Accreditation statements by the GCCS Designated Approving Authority.

II-3.3.2 Test Procedures

a. Test Conduct. Security test and evaluation (ST&E) will be conducted separately. JITC will not conduct security testing.

b. Data Collection. JITC OT&E personnel will review a copy of the ST&E report and then summarize it.

II-3.3.3 Presentation of Results. The report will contain a narrative describing GCCS accreditation status at the end of the ST&E evaluation period.

II-3.3.4 Analysis. JITC OT&E personnel will:

b. note the existence or lack of existence of the appropriate accreditation for each GCCS platform and report the results on an exception basis.

II-3.4 MOP 3-2. Number of incidents involving failure to safeguard information. There shall be no open priority one or two GSPRs associated with failure to safeguard information in the GCCS.

II-3.4.1 Data Requirements

a. Criterion Related

(1) GSPRs related to failure to safeguard information

(2) TIRs related to failure to safeguard information.

b. Supplemental Data

(1) User comments

(2) Date/time group of information

(3) Audit trail reports

(4) Exercise observer daily Test Conduct Log forms

(5) Security manager comments.

II-3.4.2 Test Procedures

a. Test Conduct. Operational personnel at GCCS test sites will operate and maintain the system in the normal GCCS employment environment during the Transition Test and the simulated crisis situation.

b. Data Collection

(1) The evaluation team will access the GSPR database to determine what GSPRs are written against this MOP.

(3) Users or data collectors will record any incident involving failure to safeguard information. Since the criterion for such incidents is zero, data will be collected on a by exception basis.

II-3.4.3 Presentation of Results

a. The evaluation team will summarize priority 1 and 2 GSPRs pertaining to unauthorized access, manipulation, or retrieval in a narrative format. Problems found that failed to show up in the GSPR database will be listed in narrative form.

b. The evaluation team will summarize user and security management questionnaire responses in narrative form. If any security incidents were documented, the report will note the site, GCCS system configuration, and user-provided details will be presented.

II-3.4.4 Analysis. This MOP will measure the ability of GCCS to safeguard information concerning the number of failures to properly safeguard information. Two levels of safeguards will be addressed: classified defense information and information designated "close-hold" by a warfighter. Specific data requirements include the time of failure to safeguard and the identification of the information that was not properly protected. Factors to be considered include platform used and the GCCS network in which the operations took place.

Numbers of incidents will be summarized by frequency of occurrence for each category of information to be protected. Potential causes for the failure to safeguard the information will be discussed with SMEs to discriminate operator from system failures.

a. The evaluation team will assess the mission impact of each unresolved problem in narrative form, identify the relevant GCCS platform involved in the incident, and list the GSPR corrective action status.

b. The evaluation team will provide a narrative summary assessing the mission impact of user and security management comments on the failure to safeguard information.

II-3.5 Issue Resolution. The security issue will be resolved based upon an evaluation of the results of the ST&E report and an evaluation of outstanding security-related GSPRs and TIRs.

II-4 MISSION SUPPORT

II-4.1 Issue 4. Can GCCS be installed and configured to include establishing user permissions, network connectivity, and security at operational sites while remaining compatible throughout the transition?

This issue addresses the ability of the GCCS Network Administrator (GNA), GCCS System Administrator (GSA), GCCS Database Administrator (GDBA), and GCCS Information Systems Security Officer (ISSO) to install and configure the system and establish permissions, network connectivity, and security procedures. GCCS must have the ability to remain operational throughout the transition to GCCS version 3.0. JOPES and GSORTS DB transactions must update both GCCS version 2.2.2 DB and GCCS version 3.0 DB to remain operational.

JITC will establish test procedures to assess compatibility between version 2.2 and version 3.0; site personnel at EUCOM and PACOM will execute these procedures. The test will consist of three parts (compatibility, installation, and limited functionality) as described below.

a. Installation Test. A list of potential Mission Support Tasks required for installation is found in Appendix K. The functional and technical user community will determine the final task list. This task is accomplished by a GCCS system administrator, database administrator, security manager, or other support person to prepare for installation, install, set-up, configure, and prepare the system for operational use.

b. Compatibility Test. The compatibility test in Appendix E will be run to determine if the system can be operated effectively during the transition from GCCS version 2.2 to GCCS version 3.0. The task will be accomplished by a system administrator, database administrator, or other support person to ensure database updates, changes and queries can be accomplished during the transition, regardless if the user is on a 2.2 or 3.0 workstation and if interfacing with the 2.2 or 3.0 server.

c. Limited Functionality Test. Upon completion the installation, users will run selected scripts to verify operational readiness of the system and ability to support sustained operations.

II-4.2 Criteria

II-4.3 MOP 4-1. Percentage of Mission Support Tasks successfully accomplished by GNAs, GSAs, GDBAs, and ISSOs.

II-4.3.1 Data Requirements

a. Criteria Related

(1) Site name

(2) Date/Time

(3) Task name

(4) SME assessment of mission task success and ease

(5) SME detailed comments on the anomalies.

b. Supplemental Data

(1) TIRs related to installation capability.

II-4.3.2 Test Procedures

a. Test Conduct. GNAs, GSAs, GDBAs, and ISSOs at the designated sites will execute the Mission Support Tasks to provide an installed and configured GCCS version 3.0 with established permissions, network connectivity, and security at multiple operational sites.

b. Data Collection

(1) Sites will provide SMEs to assess mission support tasks illustrated in Appendix K and determine the success of GCCS 3.0 Mission Support Tasks based on timeliness and the absence of error. The functional user community will establish the criterion for success of each task based on the timeliness, accuracy, completeness, and usefulness of the product. Success of Mission Support Tasks will use this rating system:

· Unsuccessful - The task could not be performed by the assigned personnel. The task could not be performed in mission required time. If during the functional test, the mission task

applicable training. Documentation accurate, complete, and readily available.

Ease of Mission Support Task will use this rating system:

· Easy - Support personnel can accomplish mission support tasks in a timely manner with little inconvenience on some tasks.

· Moderate - Support personnel can accomplish mission support tasks but experience delays or difficulties with some tasks.

· Difficult - Support personnel are unable to accomplish some mission support tasks, and experience delays or complications with other tasks.

(2) JITC OT&E test personnel, SMEs, and operational site personnel will document problems using the TIR process. Specified site personnel and JITC analysts will review each incident report to determine mission impact.

II-4.3.3 Presentation of Results

a. The evaluation team will collate and summarize SME assessments of Mission Support Tasks. A histogram will be used to summarize the number of mission support tasks that were fully successful, marginally successful, and unsuccessful, as illustrated in Figure II-4-1. A description of unsuccessful mission support tasks and their impact will be listed and explained in a narrative form.

b. The evaluation team will collaborate and summarize the SME assessments of the ease to which mission support tasks were completed. A histogram will be used to summarize the number of mission support tasks that were easy to complete, moderately easy to complete, and difficult to complete, as illustrated in Figure II-4-2. A description of any shortfalls in the ease of mission support tasks completed will be explained in narrative form.

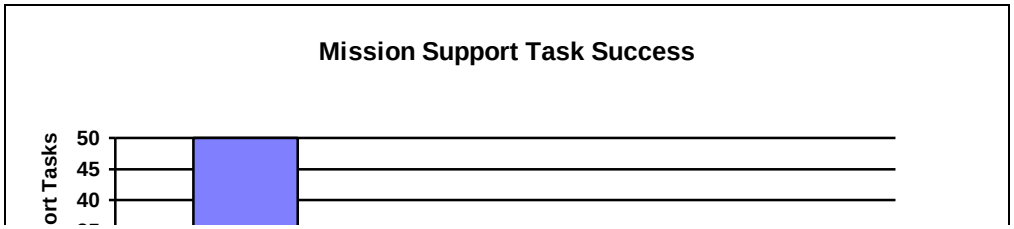


Figure II-4-1. Assessment of Mission Support Task Success of GCCS Version 3.0

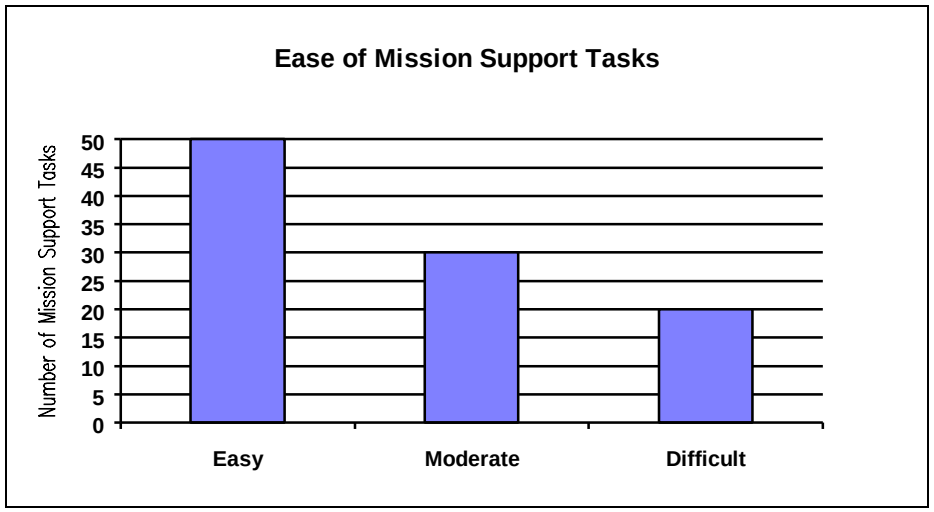


Figure II-4-2. Mission Support Task Ease Assessment

II-4.3.4 Analysis

a. JITC will calculate the percentage of mission support tasks successfully completed from tasks attempted. Unsuccessful mission support tasks will be identified to determine their impact on an operational site.

b. JITC will determine the ease with which mission support tasks were successfully completed. Shortfalls in the ease of operations will be determined and discussed as to their impact on an operational site.

II-4.4 MOP 4-2. GCCS ability to remain operational throughout the transition to GCCS version 3.0.

II-4.4.1 Data Requirements

(a) Task name

a. Test Conduct. A transition test will be conducted to verify if GCCS remains operational throughout the transition to GCCS version 3.0. The GCCS version 2.2.2 servers will remain functional throughout the transition test. A limited functional test will be conducted at the conclusion of the transition test. This test will be used to validate that mission tasks can still be accomplished. This will also act as a regression test to validate any software fixes implemented as a result of previous test activity.

b. Data Collection. A GCCS SME will observe the transition test illustrated in Appendix E and determine the success of operability during transition.

II-4.4.3 Presentation of Results. The evaluation team will collate SME assessments of the operability during transition. A description of any shortfalls will be explained in narrative form.

II-4.4.4 Analysis. JITC will determine from SME assessments the ability of sites to remain operational throughout the transition to GCCS version 3.0. Shortfalls will be identified to determine their impact on an operational site.

II-4.5 Issue Resolution. Based on operational impact of shortfalls, JITC will resolve the mission support issue.

II-5 SUSTAINABILITY

II-5.1 Issue 5. Is the GCCS capable of supporting sustained operations in an operational environment?

This issue addresses user support; training; documentation; and accessibility, consistency and dependability (ACD).

II-5.2 Criteria

a. The GCCS help desk and supporting infrastructure shall sustain GCCS users in an operational environment.

b. The training program shall educate GCCS users (system and database administrators, functional users, and others) with the skills required to perform their operational tasks on GCCS.

c. The GCCS user-level documentation shall be adequate and complete on how to accomplish operational tasks.

d. Accessibility, Consistency, and Dependability (ACD.) GCCS version 3.0 shall provide a level of ACD to allow operational users to complete mission requirements. The definition of ACD for purposes of this OT&E is:

Accessibility is the ability of users to log on and begin executing those processes in support of their mission operations at any point in time.

Consistency is the ability of the system to provide the same results to a given process independent of where it is initiated and, if the underlying data has not changed, independent of when it is initiated.

Dependability is the ability of the system to complete user initiated processes to the user's satisfaction. Note that this measure may be split into two aspects 1) the ability to eventually complete the process, and 2) the frequency of interruptions due to hung processes, restarts, and other processing difficulties.

JITC recognizes some GCCS version 2.2 applications have known inconsistencies. For example, the use of AHQ has in the past been inconsistent. Since GCCS version 3.0 does not introduce

II-5.3.1 Data Requirements

(a) Existing procedures

(b) Questionnaire responses

II-5.3.2 Test Procedures

a. Test Conduct. User support will be an evaluation of how users operate and maintain the system during normal day-to-day operations. During these operations, users access web sites for information and also contact the GCCS Help Desk as needed for resolution of problems.

b. Data Collection. JITC will review and evaluate existing procedures for user support, that is, the procedures in place for GCCS version 2.2. This evaluation applies to version 3.0 because the user support concept does not change between version 2.2 and version 3.0. This will include the help desk and availability of user information on web sites. This review will include questionnaires submitted to personnel at selected operational sites.

The user support questionnaires as illustrated in Appendix F will be distributed to users. Response deadlines are still TBD. Procedures will be reviewed for understandability and usefulness and for comparison to user responses. Questionnaire responses will be collected, summarized, and evaluated to determine level of user satisfaction.

II-5.3.3 Presentation of Results. Results of the evaluation will be presented in narrative and tabular form.

II-5.3.4 Analysis. Questionnaire responses will be reviewed to determine level of user satisfaction and also to determine specific areas of dissatisfaction, with possible indications of ways for improvement of user support.

II-5.4 MOP 5-2. Training will be evaluated on accuracy, usefulness, and completeness for each training module identified.

II-5.4.1 Data Requirements. Training program documentation for subjects:

Interoperability (AMHS)
Common Operational Picture
Air Tasking Order
Access to intelligence data
Support applications, such as Applix

b. Mission Support Tasks
Database Administrator Training
System Administrator Training
Security Manager Training
Network Manager Training
AMHS Administrator Training

The training questionnaire and course evaluation forms as illustrated in Appendix G will be used to evaluate training documentation.

II-5.4.2 Test Procedures. This phase does not include test activities. It includes evaluation only. It is designed to determine the effectiveness of training to support mission tasks and mission support tasks.

a. Test Conduct. N/A

b. Data Collection. JITC will observer training and evaluate user responses to training modules attended for accuracy, usefulness, and completeness.

II-5.4.3 Presentation of Results. Exceptions to satisfactory training will be reported in the final report in narrative form. Questionnaire results will be summarized, and any pertinent user comments will be quoted.

II-5.4.4 Analysis. A matrix will be used to evaluate each module of training and provide the data for the overall rating of the effectiveness of training. New capabilities, updates, and fixes will continually be added to GCCS, and may require changes to existing training. The evaluation will be limited to the version that is currently available, and user comments may indicate additional or refresher training is necessary.

II-5.5 MOP 5-3. Documentation will be evaluated based on availability, to include ease of access, downloading, printing, declassification, accuracy, usefulness, currentness with respect to

Installation procedures
System administrator's manual
Software user's manual
Software version descriptions
Trusted Facility Manual (TFM) checklist and procedures
Software delivery of the intended version/release
Transition Procedures
Database Administrators Manuals
Other user documentation, such as application-specific user manuals
Detailed system documentation.

II-5.5.2 Test Procedures. This phase does not include test activities. It includes evaluation only. It is designed primarily to determine the degree to which deficiencies previously observed in documentation have been corrected. Version 3.0 user documentation will be evaluated. This assessment will be conducted prior to and during the Transition Test and Simulated Crisis Situation. The intent is to influence final documentation.

a. Test Conduct. N/A.

b. Data Collection. JITC will query personnel at selected OT sites. Evaluations will be collected using the Application Documentation Usability Questionnaire in Appendix H.

II-5.5.3 Presentation of Results. Because of the large volume of documentation required for GCCS users, only the exceptions to satisfactory documentation will be reported in the final report. A general statement of overall satisfaction will also be given to cover the bulk of the documentation. It is expected that most of the documentation will be satisfactory and available to the users.

II-5.5.4 Analysis. A matrix will be developed to indicate the required documentation and the evaluation of each document identified. The evaluation will focus on factors:

Availability of documentation to users at operational sites, to include ease of access, downloading, printing, and declassification.
Accuracy
Usefulness
Currentness with respect to version 3.0 software
Completeness.

accurate, and complete.

II-5.6 MOP 5-4. This MOP will measure the time elapsed from initial power on until the user has logged on and the desktop (launch window) has appeared.

II-5.6.1 Data Requirements

(a) Site name

(b) Data collector's name

(c) Date/Time

(d) Workstation type

(e) TL is Time to Log on (elapsed time)

II-5.6.2 Test Procedures

a. Test Conduct. JITC will perform performance characterization during the MDT Stage III.

b. Data Collection. JITC will observe user actions. JITC will use a stop watch to record TL at the beginning of the day for either a local or remote log on attempt for each participating user throughout the duration of MDT Stage III. Data collectors will submit a minimum of five log on time results for each workstation during MDT Stage III performance characterization. (See Appendix I)

II-5.6.3 Presentation of Results. JITC will present the log on times for both local attempts and remote attempts in a histogram similar to Figure II-5-1.

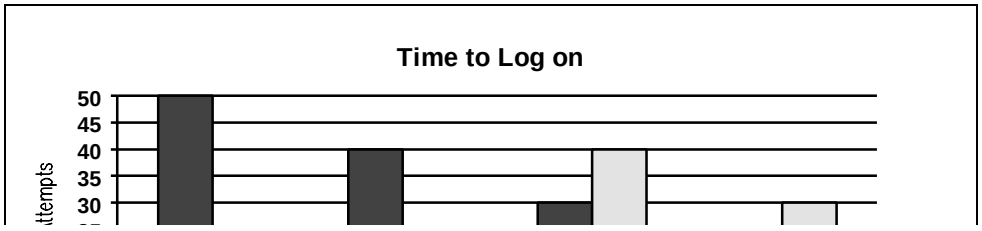


Figure II-5-1. Time to Log on

II-5.6.4 Analysis. User feedback on excessive log on times will be discussed to determine the impact on an operational site.

II-5.7 MOP 5-5. This MOP will measure the time elapsed from an application launch until the application is ready to perform useful tasks.

II-5.7.1 Data Requirements

(a) Site name

(b) Data collector's name

(c) Date/Time

(d) Workstation type

(e) Application

(f) TAA is time to access application (elapsed time)

II-5.7.2 Test Procedures

a. Test Conduct. JITC will perform performance characterization during the MDT Stage III.

b. Data Collection. JITC will observe user actions. JITC will use a stop watch to record TAA for each user sample at the test sites. Samples will consist of each user attempting to launch applications on the workstation and a remote server. Test participants will perform the designated application launches five times during the MDT Stage III. (See Appendix J)

II-5.7.3 Presentation of Results. JITC will summarize application response times where applicable by workstation and remote server. Results will be in tabular form similar to table II-5-1.

APPLICATION	TIME TO ACCESS APPLICATION (MINUTES.SECONDS)	
	WORKSTATION	REMOTE SERVER
AHQ	1.15	2
APPLIX	.50	1
COP	1.20	1.20
EVAC	.30	.50
GSORTS	1.20	2.10
IRC	1.20	1.30
JDISS	1	1.10
JEPES	1.20	1.30
LOGSAFE	1.30	2
MEPES	.45	2
NETSCAPE	1.15	1.45
RDA	1.20	1.50
S&M	1.45	2

II-5.7.4 Analysis. User feedback on excessive application response times will be discussed to determine the impact on an operational site.

II-5.8 MOP 5-6. The difference in system output when identical results are expected.

II-5.8.1 Data Requirements

(a) Site name

(b) Date/Time

(c) Tasks performed

(d) Results of tasks performed (system output).

II-5.8.2 Test Procedures

a. Test Conduct. Multiple users at different sites during MDT Stage III will perform Requirements Development Analysis (RDA), Scheduling and Movement (S&M), JOPES

II-5.8.4 Analysis. Discrepancies in system output results will be discussed to determine the impact on an operational site.

II-5.9 MOP 5-7. Number of workstation malfunctions per hour. This MOP will measure the duration of malfunctions to a GCCS user's processing power at the workstation.

II-5.9.1 Data Requirements

(a) TIR form

(b) Corrective action:

- Operator corrected; The operator corrected the malfunction at the workstation
- System Administrator (SA) or LAN manager corrected; The problem was corrected by support personnel at the site
- Not corrected at site; Site personnel could not correct the malfunction

(c) D = Duration of malfunction (elapsed time)

(d) TFR = Time functionality restored

(e) TP = Time operator perceives a problem.

Malfunction - A malfunction occurs when the user is unable to accomplish the required function or access the required application.

II-5.9.2 Test Procedures

a. Test Conduct. Users will use GCCS to perform mission-related tasks in accordance with the simulated crisis action situation.

b. Data Collection. JITC will observe user actions. JITC will record TFR and TP data in the event of a malfunction during MDT Stage III and OT&E. JITC will compute the duration of elapsed time, D = TFR - TP, for each malfunction. JITC will record the total time of observation.

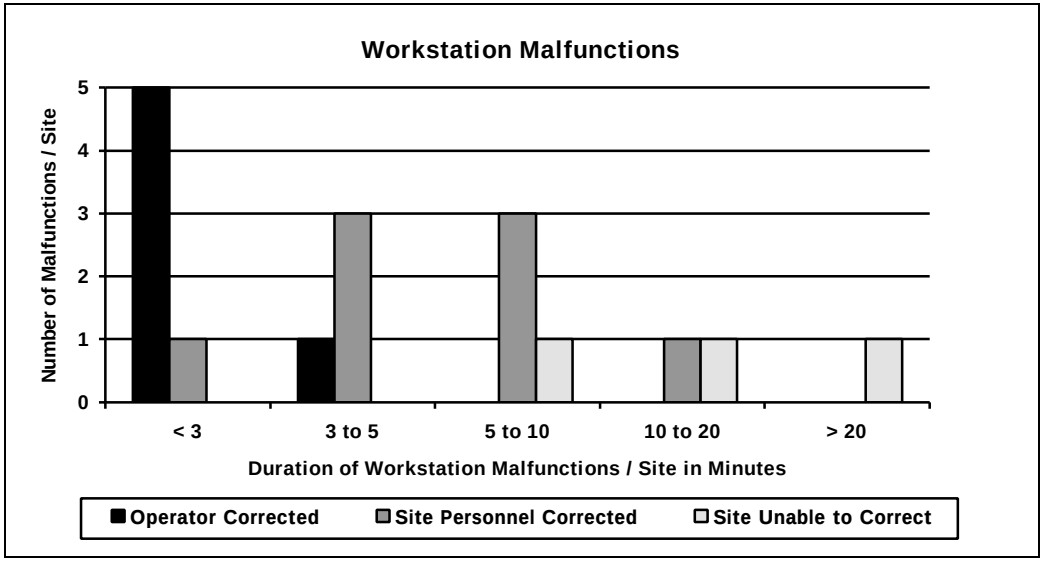


Figure II-5-2. Workstation Malfunctions

II-5.9.4 Analysis. User feedback on the duration and number of workstation malfunctions will be discussed to determine the impact on an operational site.

II-5.10 MOP 5-8. Number of local area network (LAN) malfunctions per hour. This MOP will measure the duration of malfunctions to local processing power of a GCCS site.

II-5.10.1 Data Requirements

(a) TIR form

(b) Description of the corrective action taken

(c) D = Duration of malfunction (elapsed time)

(d) TFR = Time functionality restored

(e) TP = Time operator perceives a problem.

the event of a malfunction during MDT Stage III and OT&E. JITC will compute the duration of elapsed time, D = TFR - TP, for each malfunction. JITC will record the total time of observation.

II-5.10.3 Presentation of Results. The evaluation team will collate and summarize malfunctions per site. A table similar to Table II-5-2 will depict the number of site malfunctions and the duration.

II-5.10.4 Analysis. User feedback on the duration and number of malfunctions will be discussed to determine the impact on the operational site.

II-5.11 MOP 5-9. Number of wide area network (WAN) malfunctions per hour. This MOP will measure the duration of malfunctions in which all GCCS sites are unable to communicate with one another.

II-5.11.1 Data Requirements

(a) TIR form

(b) Description of the corrective action taken

(c) D = Duration of malfunction (elapsed time)

(d) TFR = Time functionality restored

(e) TP = Time operator perceives a problem.

A WAN malfunction occurs when all GCCS sites are unable to establish communications with one another.

II-5.11.2 Test Procedures

a. Test conduct. Users will use GCCS to perform mission-related tasks in accordance with the simulated crisis action situation.

b. Data Collection. JITC will observe user actions. JITC will record TFR and TP data in the event of a malfunction during MDT Stage III and OT&E. JITC will compute the duration of elapsed time, D = TFR - TP, for each malfunction. JITC will record the total time of observation.

APPENDIX A

ACRONYMS

ACD	Accessibility, Consistency, Dependability
AHQ	Ad Hoc Query
AMHS	Automated Message Handling System
ATO	Air Tasking Order
ATOCONF	ATO Confirmation
AUTODIN	AUTOmatic Digital Network
C2	Command and Control
C4I	Command, Control, Communications, Computer and Intelligence
CAP	Crisis Action Procedures
CENTCOM	Central Command
CESP	Civil Engineering Support Plan
CINC	Commander-in-Chief
CJTF	Commander, Joint Task Force
COA	Course Of Action
COE	Common Operating Environment
COI	Critical Operational Issue
COLISEUM	Community On-Line Intelligence System for End Users and Managers
COMPASS	Computerized Movement Planning and Status System
COMPES	Contingency Operations/Mobility Planning and Execution System
COP	Common Operational Picture
COTS	Commercial Off-the-Shelf
C/S	Client/Server
CTAPS	Contingency Theater Automated Planning System
DART	Dynamic Analysis and Replanning Tool
DII	Defense Information Infrastructure
DISA	Defense Information Systems Agency
DISN	Defense Information Systems Network
DMA	Defense Mapping Agency
DMACC	Defense Mapping Agency Aerospace Center
DMS	Defense Message System

FAPES	Force Augmentation Planning and Execution System
FORSCOM	Forces Command
FRAS	Fuel Resource Analysis System
FTP	File Transfer Protocol
GARC	GCCS ATO Review Capability
GCCS	Global Command and Control System
GDBA	GCCS Database Administrator
GNA	GCCS Network Administrator
GRIS	Global Reconnaissance Information System
GSA	GCCS System Administrator
GSORTS	Global Status of Resources and Training System
GSPR	Global System Problem Report
GTN	Global Transportation Network
IMRAS	Individual Manpower Requirements and Availability System
IMS	Information Management Subsystem
INTELINK	Intelligence Link
IOC	Initial Operational Capability
IPL	Imagery Product Library
IRC	Internet Relay Chat
IRM	Information Resource Management
ISSO	Information Systems Security Officer
JCS	Joint Chiefs of Staff
JDISS	Joint Deployable Intelligence Support System
JEPES	Joint Engineer Planning and Execution System
JFAST	Joint Flow and Analysis System for Transportation
JFRG	Joint Force Requirements Generator
JIC	Joint Intelligence Center
JMCIS	Joint Maritime Command Information System
JITC	Joint Interoperability Test Command
JNAV	JOPES Navigation
JOPES	Joint Operation Planning and Execution System
JPAC	Joint Personnel Asset Visibility
JPEC	Joint Planning and Execution Community

LOGSAFE	Logistics Sustainment Analysis and Feasibility Estimator
MAGTF II	Marine Air-Ground Task Force War Planning System
MDT	Modified Developmental Testing
MEPES	Medical Planning and Execution System
METOC	Meteorological and Oceanographic
MIDB	Modernized Integrated Database
MIGDB	Modernized Integrated database Intelligence product Archive/Intelligence product library for GCCS
MOP	Measure of Performance
MWF	Medical Working File
NCA	National Command Authority
NIMA	National Imagery and Mapping Agency
NMCC	National Military Command Center
OMF	Operational Mission Failure
OPLAN	Operation Plan
OPORD	Operation Order
OSF	Operational Support Facility
OT	Operational Test
OT&E	Operational Test and Evaluation
PACOM	Pacific Command
PDR	Predefined Report
PFE	Prototype Feasibility Estimator
PLRS/EPLRS	Position Locating Reporting System/Enhanced Position Locating Reporting System
PMO	Program Management Office
RAPIDSIM	Rapid Inter-theater Deployment Simulator
RDA	Requirements Development and Analysis
RDBMS	Relational Database Management System
RFA	Reference File Administration
RID	Requirements Implementation Document
RPI	Real Property Inventory
RUDRS	Reserve Unit Deployment Resources System

STU	Secure Telephone Unit
SYS SVC	System Services
TADIL B	Tactical Digital Information Link B
TARGET	Theater Analysis and Replanning Graphical Execution Toolkit
TBD	To Be Determined
TBIS	Tactical Broadcast Information System
TBMD	Theater Ballistic Missile Display
TCC	Transportation Component Command
TCCESI	Transportation Component Command External System Interface
TEMP	Test and Evaluation Master Plan
TFE	Transportation Feasibility Estimator
TIBS	Tactical Information Broadcast System
TIP	Technology Insertion Project
TIR	Test Incident Report
TLCF	Teleconferencing
TPFDD	Time-Phased Force and Deployment Data
TRANSCOM	Transportation Command
TRAP	Tactical Receive Equipment and Related Applications
TS	Top Secret
UB	Unified Build
USMTF	US Message Text Format
USTC	US Transportation Command
WAN	Wide Area Network
WMF	Medical Working Files
WWMCCS	World Wide Military Command and Control System
WWW	World Wide Web

APPENDIX B

Global Command and Control System (GCCS)

GCCS TEST INCIDENT REPORT		
Use this form to report a malfunction, unexpected system behavior, operational difficulty, or critical preventive maintenance action. If you need more space, use the reverse side of this form. TIRs will be faxed to the JITC at the end of the day.		
1. PROBLEM DESCRIPTION. (Please describe what you were doing when the malfunction occurred and what happened.)		
2. DATE AND TIME PROBLEM OCCURRED.		3. DATE AND TIME FUNCTIONALITY RESTORED.
_____ _____		_____ _____
Month and Day	Zulu Time	Month and Day Zulu Time
4. DESCRIPTION OF IMPACT. Please describe the problem impact on your operations (identify the functions that could not be performed or the severity of the problem).		
5. CORRECTIVE ACTION. (See reverse for definitions)		
Operator corrected O	SA or LAN manager corrected O	Not corrected at site. O

6. SITE POC

Name:_____ Location:_____
_____ _____

Phone numbers: _____ _____
Commercial DSN

CORRECTIVE ACTION DEFINITIONS

Operator corrected. The operator corrected the problem at the workstation.

System Administrator or LAN manager corrected. The problem was corrected by support personnel other then the user at the sites location.

Not corrected at site. Site personnel could not correct the problem.

Additional Space to complete answers.

APPENDIX C

Global Command and Control System (GCCS)

MISSION TASK DATA COLLECTION FORM

Operator Name:_____

Date:_____

Mission Task	Anomaly (if any)	Fully Successful	Marginally Successful	Unsuccessful

Other Comments:

The subject matter expert (SME) will evaluate each mission task listed in Appendix K. The SME will fill out a mission task data collection form for each day of the Simulated Crisis Situation Test. Mission task data collection forms will be faxed to JITC at the end of each day. Evaluation factors for success:

· Unsuccessful - No product, product cannot be used by the intended recipient for the intended purpose, or the product is too late or inaccurate to support the mission.

· Marginally Successful - Product is accurate and timely, but requires workarounds to produce, or the intended recipient must use workarounds to produce the product.

· Fully Successful (F) - Product is sufficiently timely, accurate, complete, and useful. Fully supports mission accomplishment by the intended recipient.

APPENDIX D

Global Command and Control System (GCCS)

MISSION SUPPORT TASK DATA COLLECTION FORM

Operator Name:_____

Date:_____

TASK	Anomaly (if any)	Fully successful	Marginally Successful	Un successful	Easy	Moderate	Difficult

Other Comments:

The subject matter expert (SME) will evaluate each mission support task in Appendix K. The SME will fill out a mission task data collection form for each mission support task performed. Mission support data collection forms will be faxed to JITC at the end of each day. Use the following as evaluation factors for success:

· Unsuccessful - The task could not be performed by the assigned personnel. The task could not be performed in mission required time. If during the functional test, the mission test could not be completed and the cause was determined to be a latent result of a mission support task.

· Marginally Successful - Task performed within mission required time, but with workarounds. Documentation lacks sufficient details. Task not fully covered in applicable training.

· Fully Successful - Task easily performed in a timely manner. Task fully covered in applicable training. Documentation accurate, complete, and readily available.

Use the following as evaluation factors for ease:

· Easy (E) - Support personnel can accomplish mission support tasks in a timely manner

complete details for any anomalies that occur during testing.

APPENDIX E

Global Command and Control System (GCCS)

COMPATIBILITY TEST (GCCS Version 2.2.x to Version 3.0)

Compatibility between the two versions will be accomplished in two distinct operations; installation and post-installation acceptance testing.

1. NMCC will not have a GCCS version 3.0 master database server for MDT or OT&E testing. A master version 2.2.x database will be determined as the master source of data for the installation of version 3.0 at each site. Sites will use their additional suite for installation of version 3.0 and must use the master version 2.2.x as a source for the Snapshot update and Airfields update. This update is automated from the master source and compatibility will either exist at installation or the installation will fail - thus causing a "stop test" during the MDT installation. The GSORTS update is the third compatibility test during this time frame - and must be coordinated with the GSORTS Data feed personnel at NMCC (Mr. Darryl Grey, DSN 224-4881). This is the final point of compatibility failure/success during installation. The Snapshots and GSORTS downloads must be successful to continue testing since accurate and concurrent reference data is needed for transactions to flow between version 2.2.x and version 3.0 databases. The Airfields update is needed, but testing can continue for all other functions (except the Airfields functionality) without a successful update of data during installation.

2. Post-installation compatibility acceptance testing is an informal term to describe what should be less than a one-day evaluation. The evaluation assumes the following coordination has occurred:

a. All sites know the IP address, FQDN (text name for the IP address), and password for the "sm" password for all other sites. This information is essential to setting up the TDS/TP transaction network in the Systems Services network (domain) function.

b. All sites have entered the IP address and FQDN in the /etc/hosts file on their test database server in the same format used for the real world network. This is essential for the proper update of the Systems Services network (domain) function.

c. The site SA/DBA will obtain from the site FM an OPLAN in TPFDD (B8) format that contains approximately 1000 force records and at least some non-unit records and force modules. The OPLAN will be saved in TPFDD format as OPLANID "10tst". A second copy of the

row of the table represents a sequential step in the testing. The initial action is shown in bold, and the action check and comments are in the remaining columns in the row. The action and checks are accomplished in System Services (SS), RDA, AHQ, UNIX system, and ORACLE (ORA).

3. The Subject Matter Expert (SME) will determine whether the following actions were completed successfully. The last page of the assessment is provided for comments. When commenting, please indicate the section and item the comment refers to.

Transactions Compatibility Tests		
3.0 Database	2.2.x Database	COMMENTS
1. Initialize local, normal access OPLAN = 101tt (empty shell) SS	Ensure receipt and upload of SYNCHT and ROUTHT transactions SS	Also check OPLAN table in database to ensure the OPLAN residence code data element is set to "N" on ccdep1 ORA
2. Upload the 10tst TPFDD to the 101tt OPLAN SS	Ensure no transactions flow SS	
3. Distribute the 101tt OPLAN to the ccdep1 database SS	Monitor receipt of all transactions SS	Do a TPFDD download, FTP to cctng1, and do a "diff" to a TPFDD download of 101tt to ensure a complete flow of the OPLAN. UNIX and SS.
4. Do a reload of OPLAN 10crr as OPLAN = 101rr as a local, limited access (ensure more than 15 userid in limited access) SS	Ensure receipt and upload of SYNCHT and ROUTHT transactions and SCHDET (carrier) transactions SS	Also check OPLAN table in database to ensure the OPLAN residence code data element is set to "N" on ccdep1 and access type is "L" ORA
5. Distribute OPLAN 101rr to ccdep1 database SS	monitor receipt of all transactions SS	Do a TPFDD download at receiving site, FTP to cctng1 (sending site), and do a " diff" to a TPFDD download of 101rr to ensure a complete flow of the OPLAN. UNIX and SS
6. Change 101rr OPLAN access to Normal access SS	Check receipt of transaction and that access changed to normal SS	
7. Repeat steps 1 - 3 above on ccdep1 for OPLAN = 102tt, and conduct appropriate actions on cctng1		

Functionality Compatibility Tests		
ACTION	CHECKS	COMMENTS
1. Sign on to a garrison version 2.2.x Applications server and DBSELECT to the test version 3.0 database	Connection complete	
2. Select RDA icon and OPLAN 101rr (or 102rr)	RDA Summary comes up and TPFDD edit comes up with correct data	
3. Modify a force requirement in OPLAN	Modification is accepted in version 3.0 database	Check version 2.2.x database (use another user account to check) to ensure transaction updates
4. Add a force requirement (ULN) to the OPLAN	Modification is accepted	Check version 2.2.x database (use another user account to check) to ensure transaction updates
5. Add the above ULN to a force module	Modification is accepted	Check version 2.2.x database (use another user account to check) to ensure transaction updates
6. Select the S&M icon and create a carrier against the OPLAN	Modification is accepted	Check version 2.2.x database (use another user account to check) to ensure transaction updates
7. Select the AHQ icon, import a preferred (CCJ3 operations) retrieval, and run is against the OPLAN	Retrieval data is obtained	
8. Exit all applications and sign off the server.	No errors received	
9. Sign on to the test applications server (version 3.0) and DBSELECT to the garrison database version 2.2.x	Connection complete	
10. Accomplish all tests described in steps 2-8 above n OPLAN 101tt or 101rr		

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APPENDIX F

Global Command and Control System (GCCS)

USER SUPPORT QUESTIONNAIRE

The purpose of this questionnaire is to evaluate the users assessment of the support provided in GCCS. Please fill out this form for each occurrence in which additional assistance was required. Questions will be either Yes/No, or short answer/explanation. For short answer/explanation questions, please write in your response in the spaces provided. Please answer all questions to the best of your ability. Questionnaires will be faxed to the JITC at the end of each day.

A. Date: _____
B. Name: _____
C. Duty Location: _____
D. Job Title / Description: _____

Problem Description

Source of Resolution					
Web Page	O	GCCS Help Desk	O	Other	O

Question	Yes	No	Don't Know
1. Was the response given effective?	O	O	O

5. Was the response useful in supporting the users mission?	O	O	O

If you have answered “No” to any of the above questions please provide specific details and an explanation in the space provided.

APPENDIX G

Global Command and Control System (GCCS)

TRAINING EVALUATION

Name:_____ Your Organization:_____

Classroom Site Location:_____ Class Dates:_____

Class Name:_____

Please answer all questions to the best of your ability. For short answer/explanation questions, please write in your response in the spaces provided. If you have no experience with the topic of a short answer question, please write "No Experience" in the space provided. If you need more space to write your answer, the last page of the questionnaire is provided for comments

Question	1 to 4 Weeks	1 to 2 Months	2 to 6 Months	More than 6 Months
1. How long have you been using the GCCS?	0	0	0	0

Question	Yes	No	Don't Know
2. Which of the following AETC GCCS training courses have you completed? (indicate all that apply)			
GCCS User Introduction	O	O	O
GCCS COP Familiarization	O	O	O

GCCS AMHS Administrator	O	O	O
GCCS Security Administrator	O	O	O
GCCS Basic Administrator	O	O	O
Other (specify) _____	O	O	O

Please complete the following questionnaire for recent course.

Please use a scale of 1 to 5, with 5 being the highest rating.

3.	The instructors adequately covered course material	1	2	3	4	5
4.	The course material relates to what I want to know about the subject	1	2	3	4	5
5.	I will be able to apply what I learned during this course to my job	1	2	3	4	5
6.	The course has the right mix between lecture/discussion and hands-on applications.	1	2	3	4	5
7.	The length of the course was just right	1	2	3	4	5
8.	I found the training materials helpful and expect to use them on the job	1	2	3	4	5
9.	The slides/viewgraphs helped me understand the course material	1	2	3	4	5
10.	The practical exercises reinforced important concepts and skills.	1	2	3	4	5
11.	I understand how the applications assist a planner/operator.	1	2	3	4	5
12.	I can use the reports as analysis tools in my job.	1	2	3	4	5

16. The most helpful aspect of the course is

17. Other comments (be as specific as possible about individual lessons, training materials, slides, etc.):
(continue on reverse)

18. Other comments (be as specific as possible about individual lessons, training materials, slides, etc.):

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APPENDIX H

Global Command and Control System (GCCS)

DOCUMENTATION QUESTIONNAIRE

Documentation for GCCS version 3.0 will be available on the DISA GCCS web page and on DISA DII COE web page. Selected documents are listed in this appendix. Please review the attached list of documentation.

1. What difficulties have you had in locating and downloading documents when needed?

2. What additional documentation that is currently unavailable to you do you need to accomplish your mission on GCCS?

3. What difficulties have you had in learning the operations of the application from the application user manuals?

4. Of the documents that you use, identify the five that give you the most problems. Please identify Application, Document Title, Problem Areas, and Suggestions for Improvement:

A. _____

_____

_____

_____

B. _____

_____

_____

_____

C. _____

5. Please identify the documents that you use by entering (in the frequency of use column), an estimate of the number of times per month that you use the document. Enter a zero for those that you do not use.

6. In each of the remaining columns, for each of the evaluation factors as indicated in column headings, please evaluate each document you use by entering the numeric value that corresponds to your choice of the following answers, as they pertain to each of the below listed evaluation statements:

1	2	3	4	5
strongly disagree	mildly disagree	neutral	mildly agree	strongly agree

Availability: This document is available at my site, or I am able to easily access it for downloading, printing, and declassification.

Accuracy: The information contained and presented in the document is accurate as it pertains to this application.

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CONSOLIDATED DEVELOPERS TOOLKIT V3.0.0.5 INSTALLATION GUIDE							
UNIFIED BUILD V3.0.2.5 UBDEV SOFTWARE VERSION DESCRIPTION							
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UNIFIED BUILD V3.0.2.5 L11 ADMIN INSTALLATION GUIDE							
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ALERTS V 1.3.4.2 INSTALLATION GUIDE							
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CONSOLIDATED SYSTEM V3.1 SYSTEMS ADMIN MANUAL							
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JMTK V1.0.0.10 SOFTWARE VERSION DESCRIPTION							
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KERNEL PATCH 2 V3.0.0.3P2 SOFTWARE VERSION DESCRIPTION							

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KERNEL V3.0.0.3 SECURITY MANUAL							
NEWSGROUP USER MANUAL							
NETSCAPE V1.0.0.3 SOFTWARE VERSION DESCRIPTION							
NETSCAPE V1.0.0.3 INSTALLATION GUIDE							
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ORACLE CLIENT APPLICATIONS V7.3.2 ABSTRACT OR RELEASE NOTES							
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ORACLE RDBMS V7.3.2 INSTALLATION GUIDE							

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CONSOLIDATED DEVELOPERS TOOLKIT V3.0 SOFTWARE VERSION DESCRIPTION							
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UNIFIED BUILD V3.0.2.5 UBDEV INSTALLATION GUIDE							
UNIFIED BUILD V3.0.2.5 TMS/UCP SOFTWARE VERSION DESCRIPTION							
UNIFIED BUILD V3.0.2.5 TMS/UCP INSTALLATION GUIDE							
UNIFIED BUILD V3.0.2.5 TMS/UCP SYSTEMS ADMIN MANUAL							
UNIFIED BUILD V3.0.2.5 TMS/UCP USER MANUAL							
UNIFIED BUILD V3.0.2.5 LINK 11/TADIL A SOFTWARE VERSION DESCRIPTION							
UNIFIED BUILD V3.0.2.5 LINK 11/TADIL A INSTALLATION GUIDE							

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UNIFIED BUILD V3.0.2.5 LINK 11/TADIL A USER MANUAL							
UNIFIED BUILD V3.0.2.5 L11 ADMIN SOFTWARE VERSION DESCRIPTION							
UNIFIED BUILD V3.0.2.5 L11 ADMIN INSTALLATION GUIDE							
VOLUME MANAGER V 3.0.0.2 ABSTRACT OR RELEASE NOTES							
NETSITE WEB SERVER1.0.0.2 SOFTWARE VERSION DESCRIPTION							
TCP WRAPPERS V1.0.0.2 ABSTRACT OR RELEASE NOTES							
USER DOCUMENTS OTHER THAN DII COE							
AD HOC QUERY USER MANUAL							
AD HOC QUERY ABSTRACT OR RELEASE NOTES							
AIRFIELDS INSTALLATION GUIDE							
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AIRFIELDS SOFTWARE VERSION DESCRIPTION							
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TACTICAL C4I IMAGERY INSTALLATION GUIDE							
COLISEUM ABSTRACT OR RELEASE							

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NOTES							
COLISEUM SECURITY MANUAL							
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COP SOFTWARE VERSION DESCRIPTION							
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COP TIME SYNC INSTALLATION GUIDE							
COP USER MANUAL							
DSRS ABSTRACT OR RELEASE NOTES							
DSRS INSTALLATION GUIDE							
DSRS SOFTWARE VERSION DESCRIPTION							
DSRS SYSTEMS ADMIN MANUAL							
DSRS USER MANUAL							
ECPN Electronic Commerce Processing Node v1.0.6 SECURITY MANUAL							

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ECPN SOFTWARE VERSION DESCRIPTION							
ECPN SYSTEMS ADMIN MANUAL							
ECPN USER MANUAL							
ELVIS INSTALLATION GUIDE							
ELVIS SOFTWARE VERSION DESCRIPTION							
ELVIS SYSTEMS ADMIN MANUAL							
ELVIS USER MANUAL							
ELVIS WEBSOF INSTALLATION GUIDE							
ELVIS WEBSOF SOFTWARE VERSION DESCRIPTION							
ELVIS WEBSOF SYSTEMS ADMIN MANUAL							
EMPIRE UNIX SYSTEM MANAGEMENT AGENT SOFTWARE VERSION DESCRIPTION							
EMPIRE UNIX SYSTEM MANAGEMENT AGENT OPERATORS MANUAL							
EXTERNAL SYSTEMS INTERFACE USER MANUAL							
EVAC SOFTWARE VERSION DESCRIPTION							
EVAC USER MANUAL							

DOCUMENT TITLES	FREQUENCY OF USE	AVAILABILITY	ACCURACY	USEFULNESS	CURRENT WITH V3.0 RELEASE	COMPLETENESS	OVERALL EVALUATION
EVAC DATABASE SOFTWARE VERSION DESCRIPTION							
FRAS INSTALLATION GUIDE							
FRAS USER MANUAL							
GCCS V2.1 INSTALLATION GUIDE							
GCCS V2.1 OPERATORS MANUAL							
GCCS V2.1 SECURITY MANUAL							
GCCS V2.1 SOFTWARE VERSION DESCRIPTION							
GCCS V2.1 SYSTEMS ADMIN MANUAL							
GCCS V2.1 USER MANUAL							
GCCS V2.2 HP INSTALLATION GUIDE							
GCCS V2.2 INSTALLATION GUIDE							
GCCS V2.2 SOFTWARE VERSION DESCRIPTION							
GCCS V2.2 SYSTEMS ADMIN MANUAL							
GCCS V2.2.1 ABSTRACT OR RELEASE NOTES							
GCCS V2.2.1 INSTALLATION GUIDE							
GCCS V2.2.1 SOFTWARE VERSION DESCRIPTION							
GCCS V2.2.2 ABSTRACT OR RELEASE NOTES							

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GCCS V2.2.2 INSTALLATION GUIDE							
GCOEPTC SOFTWARE VERSION DESCRIPTION							
GPS TIME GLOBAL POSITION TIME SYNCH SOFTWARE VERSION DESCRIPTION							
GPS TIME USER MANUAL							
GRIS ABSTRACT OR RELEASE NOTES							
GRIS GLOBAL RECONNAISSANCEINFORMATION SYSTEM SOFTWARE VERSION DESCRIPTION							
GRIS OPERATORS MANUAL							
GRIS SYSTEMS ADMIN MANUAL							
GRIS USER MANUAL							
Global Status of Resources and Training SOFTWARE VERSION DESCRIPTION GSORTS (GORA, GUPD, GWORLD, GSORTS CLIENT)							
GSORTS ABSTRACT OR RELEASE NOTES							
GSORTS USER MANUAL							
INFORMATION MANAGEMENT SUBSYSTEM/REFERENCE FILE MANAGEMENT							

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ENCOMPASS ITV ABSTRACT OR RELEASE NOTES							
JDISS IPA CLIENT ABSTRACT OR RELEASE NOTES							
JDISS IPA CLIENT SYSTEMS ADMIN MANUAL							
JDISS IPA CLIENT INSTALLATION GUIDE							
JDISS IPA CLIENT SOFTWARE VERSION DESCRIPTION							
JDISS SERVER/CLIENT USER MANUAL							
JDISS SERVER/CLIENT ABSTRACT OR RELEASE NOTES							
JDISS SERVER/CLIENT SYSTEMS ADMIN MANUAL							
JDISS SERVER/CLIENT SOFTWARE VERSION DESCRIPTION							
JDISS SERVER/CLIENT INSTALLATION GUIDE							
JEPES USER MANUAL							
JOPES USERS USER MANUAL							
JTAV ABSTRACT OR RELEASE NOTES							
JTAV JOINT TOTAL ASSET VISIBILITY SOFTWARE VERSION DESCRIPTION							

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JTAV USER MANUAL							
LINK 11 USER MANUAL							
LINK 11 SOFTWARE VERSION DESCRIPTION							
LOGSAFE USER MANUAL							
MEDICAL PLANNING AND EXECUTION (MEPES)USER MANUAL							
HP NETMETRIX POWER AGENT ABSTRACT OR RELEASE NOTES							
HP NETMETRIX POWER AGENT OPERATORS MANUAL							
HP NETMETRIX POWER AGENT SOFTWARE VERSION DESCRIPTION							
NETSCAPE WEB BROWSER USER MANUAL							
NETSCAPE WEB BROWSER INSTALLATION GUIDE							
NETSCAPE WEB BROWSER SYSTEMS ADMIN MANUAL							
NON-UNIT PERSONNEL GENERATOR USER MANUAL							
PREDEFINED REPORTS (JOPES)USER MANUAL							
PREDEFINED REPORTS USER MANUAL							

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REQIREMENTS DEVELOPMENT (RDA)USER MANUAL							
REFERENCE FILES ADMINISTRATION (RFA)USER MANUAL							
RUDRS ABSTRACT OR RELEASE NOTES							
RUDRS OPERATORS MANUAL							
RUDRS SOFTWARE VERSION DESCRIPTION							
SHEDULING AND MOVEMENT USER MANUAL USER MANUAL							
USTC SMI USER MANUAL							
SYSTEMS SERVICES (JOPES)ABSTRACT OR RELEASE NOTES							
SYSTEMS SERVICES (JOPES)SYSTEMS ADMIN MANUAL							
SYSTEMS SERVICES (JOPES)USER MANUAL							
S&M SYNCHTOOLS SOFTWARE VERSION DESCRIPTION							
TARGET SYSTEMS ADMIN MANUAL							
TARGET USER MANUAL							
TBMD SOFTWARE VERSION DESCRIPTION							
TBMD USER MANUAL							

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TIBS SOFTWARE VERSION DESCRIPTION							
TIBS USER MANUAL							
TELECONFERENCING USER MANUAL							
JMCIS UB 2.1.3.4 USER MANUAL							
JMCIS UB 2.1.3.4 SYSTEMS ADMIN MANUAL							
JMCIS UB 2.1.3.4 SOFTWARE VERSION DESCRIPTION							
JMCIS UB 2.3.0.2 OPERATORS MANUAL							
JMCIS UB 3.0.1.6G USER MANUAL							
JMCIS UB 3.0.1.6G ABSTRACT OR RELEASE NOTES							
JMCIS UB 3.0.1.6G SYSTEMS ADMIN MANUAL							
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APPENDIX I

Global Command and Control System (GCCS)

TIME TO LOG ON DATA COLLECTION FORM
This form will be used as data collection for the Accessibility of GCCS version 3.0. The JITC data collector at each participating site during MDT stage III performance characterization will use a stopwatch to record log on results. Data collectors will submit five samples from each workstation throughout the duration of MDT stage III. Log on Time is calculated from the time the power switch is turned on till the desktop (launch window) appears and is ready for user interaction. The data collector may request users log on at different times to allow the collector to record times for each workstation. Data collectors will fax collection forms to JITC at the end of each day.

Background Information	
A. _____ Site Name	B. _____ Date (Month and Day)
C. _____ Data Collector's Name	

Log on Data				
1.	Workstation Type	PC O	HP O	Solaris O
2.	Is the Workstation on a Local GCCS LAN?		Yes O	No O
3.	Current Zulu Time _____			

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APPENDX J

Global Command and Control System (GCCS)

TIME TO ACCESS APPLICATION DATA COLLECTION FORM
This form will be used as data collection for the Accessibility of GCCS version 3.0. The JITC data collector at each participating site during MDT Stage III performance characterization will use a stopwatch to record application access results. Data collectors will record application access results five times from each workstation for the predetermined applications throughout the duration of MDT Stage III. Access is calculated from the time a user clicks on an icon till the application is running, and ready for user input. Data collectors will fax collection forms to JITC at the end of each day. NOTE: Applications will be determined from each sites assessment of their importance.

Background Information
A. _____ B. _____ Site Name Date (Month and Day) C. _____ Data Collector's Name

Log on Data				
1.	Workstation Type	PC O	HP O	Solaris O
2.	Are you accessing the application locally or using run remote or xterm?		Local O	Remote O

APPLICATION	ZULU TIME	ACCESS TIME

APPENDIX K

Mission Tasks and Mission Support Tasks

The following information has been extracted from the GCCS User Characterization Profile and other sources to produce a partial listing of possible mission/mission support tasks for testing GCCS Version 3.0.

Crisis Action Procedures. CAP provides a framework for describing the unfolding of a crisis requiring a military response. Table 1 lists the six CAP phases.

Table 1. CAP Phases

Phase	Title
I	Situation Development
II	Crisis Assessment
III	Course of Action Development
IV	Course of Action Selection
V	Execution Planning
VI	Execution

Each phase is punctuated by one or more scenario events. The scenario event usually triggers a response from one or more of the Joint Planning and Execution Community (JPEC) players in the crisis. Many responses consist of an activity supported by the GCCS. The trace from a scenario event to the GCCS activity performed by specific JPEC member(s) is contained in the CAP Matrix that follows.

Participant. The scenario event triggers a response/action at certain levels in the JPEC. The actions contained in the matrix are limited to those participants with the most GCCS play. The participants listed in the matrix are:

CJCS - Chairman of the Joint Chiefs of Staff
SPD - Supported Commander
SPG - Supporting Commander

Table 9 contains other Mission Support Tasks for Systems Administrators, Security Administrators, Database Administrators, Functional Database Managers, and Track Database Managers.

Table 2. Mission Tasks, Crisis Action Planning Matrix, Phase I

Phase I - Situation Development Phase I begins with an event having possible national security implications and ends when the CINC submits his assessment of the situation to the National Command Authority (NCA) and the Chairman of the Joint Chiefs of Staff.				
PARTICIPANT	BACKGROUND ACTION	MISSION TASK	OUTPUT/PRODUCT	ANTICIPATED APPLICATIONS
JCS	Monitor the situation and evaluate reports from all sources; Request an assessment report from the supported commander	Generate a GENSER message to SPD	Message to SPD	AMHS
SPD	Review message	Provide a CINCs assessment report	OPREP-3 message	AMHS

Table 3. Mission Tasks, Crisis Action Planning Matrix, Phase II

Phase II - Crisis Assessment Phase II begins with a report from the supported commander and ends with a decision by the NCA to return to the pre-crisis situation, or to have military options developed for possible consideration and possible use.				
PARTICIPANT	BACKGROUND ACTION	MISSION TASK	OUTPUT/PRODUCT	ANTICIPATED APPLICATIONS
ALL	Anticipation of action	Review OPLANs and CONPLANs for applicability	List of available/applicable plans	RDA, AHQ
ALL	Anticipation of action	Review force readiness	Unit readiness reports	GSORTS, AHQ
CJCS	Request SPD take action	Request SPD establish a crisis Newsgroups	Message to SPD	AMHS
SPD	Respond to message	Implement the crisis Newsgroups	Newsgroups established; message to participants to join	Newsgroups, AMHS
ALL	Respond to message	Subscribe to Newsgroups	Newsgroups actions	Newsgroups
CJCS	Require USTC review strategic lift asset employment availability	Generate a Newsgroups message to USTC	Newsgroups message	Newsgroups

USTC	Review the status of strategic lift assets	Review lift asset availability; Review lift asset status	Lift Asset Reports	GSORTS
USTC & SPD	Determine amount of lift available for operation	Publish numbers of lift assets to be made available	Updated transportation Models	Newsgroups ADANS, STRADS SEASTRADS

Table 4. Mission Tasks, Crisis Action Planning Matrix, Phase III

Phase III - Course of Action Development Phase III begins with a decision to develop possible military Courses of Action (COAs), normally transmitted by a CJCS Warning Order, and ends when COAs are presented to the NCA.				
PARTICIPANT	BACKGROUND ACTION	MISSION TASK	OUTPUT/PRODUCT	ANTICIPATED APPLICATIONS
CJCS	Establish command relationships; State mission, objectives, and known constraints; Direct the development of COAs	Publish Warning Order	Warning Order message published	Newsgroups AMHS
ALL except CJCS	Respond to Warning Order; Initiate development of possible COAs using GCCS	Review existing OPLANs/ TPFDDs	Existing files access	RDA, AHQ GSORTS
ALL	Update an existing OPLAN	Refine existing supported/supporting OPLANs/TPFDDs	Modified OPLAN/TPFDD	RDA, AHQ GSORTS
SPD	Initiate development of new COAs /TPFDDs	Develop new COAs/TPFDDs using GCCS	Newly initiated plan	SS, RDA
ALL except SPD and CJCS	Receive new TPFDD	Review and modify new TPFDD	Updated new TPFDD	RDA, AHQ PDR, GSORTS IMS, TPEDIT
SPD	Prepare new TPFDD for evaluation	Generate sustainment records for the new TPFDD using JEPES	TPFDD file processing	JEPES LOGSAFE
		Generate sustainment records for the new	TPFDD file processing	MEPES

		TPFDD using MEPES		LOGSAFE
		Generate sustainment records for the new TPFDD using LOGSAFE	TPFDD file processing	LOGSAFE
SPD	Request evaluation of proposed COAs	Publish an Evaluation Request; Evaluate availability, combat readiness and suitability of forces; Evaluate availability of sustainment; Evaluate database completeness	Newsgroups Evaluation Request	Newsgroups

Table 4. Mission Tasks, Crisis Action Planning Matrix, Phase III (continued)

PARTICIPANT	BACKGROUND ACTION	MISSION TASK	OUTPUT/PRODUCT	ANTICIPATED APPLICATIONS
ALL except SPD and CJCS	Receive and review Evaluation Request	Perform an evaluation of the COAs/TPFDDs	Logical Errors Report; TCC Pre-edit Report	RDA, AHQ, PDR
SPD	Fatal Error Free TPFDD required for transportation analysis	Produce a Fatal Error Free TPFDD	Logical Errors Report; TCC Pre-edit Report TPFDD ready for transportation analysis	Newsgroups RDA
SPD	Request Deployment Estimate by USTC	Request USTC develop a preliminary Deployment Estimate	Newsgroups request for Deployment Estimate	Newsgroups
USTC	Review the request for a Deployment Estimate	USTC conduct Deployment estimates on each viable COA/TPFDD	Land summary and associated graphs and reports; Sea summary and associated graphs and reports; Air summary and associated graphs and reports; Airlift summary profile; Sealift summary profile; Lateness by supply class reports; Force Module Closure Profiles	SS JFAST
		Prepare and submit Deployment Estimate Response message	Deployment Estimate Response message	Newsgroups
SPG	Preparation and submission of Evaluation Response to the SPD; Review of Deployment Estimate Response	Prepare an Evaluation Response message (OPREP-1)	Evaluation Response message	Newsgroups

SPD	Preparation and submission of Commanders Estimate; Recommendation of a COA; Review of Evaluation Response	Prepare and submit the Commanders Estimate	Commanders Estimate	Newsgroups
ALL	Review of Commanders Estimate			Newsgroups

Table 5. Mission Tasks, Crisis Action Planning Matrix, Phase IV

Phase IV - Course of Action Selection Phase IV begins when COAs are presented to the NCA and ends when a COA is selected. The primary activity in this phase of crisis planning rests with the Chairman of the Joint Chiefs of Staff and NCA. All other members of the JPEC continue their activities as described in Phases II and III.				
PARTICIPANT	BACKGROUND ACTION	MISSION TASK	OUTPUT/PRODUCT	ANTICIPATED APPLICATIONS
CJCS	Review and Evaluate COAs presented in the Commanders Estimate; Alert Order is published directing execution planning activities commence for Selected COA	Alert Order published directing execution planning activities commence for Selected COA	Alert Order	Newsgroups AMHS
ALL	Receive and review Alert Order			Newsgroups
SPD	Publish a TPFDD Letter of Instruction (LOI)	Publish a TPFDD LOI that provides procedures for the deployment, replacement, and redeployment of the forces in	TPFDD LOI	Netscape Newsgroups

		support of Selected COA		

Table 6. Mission Tasks, Crisis Action Planning Matrix, Phase V

Phase V - Execution Planning Phase V begins when a Planning or an Alert Order is received and ends when an executable OPORD is developed and approved for execution on order. Based on receipt of the Alert Order, activities commence for further selected COA refinement and preliminary scheduling activities.				
PARTICIPANT	BACKGROUND ACTION	MISSION TASK	OUTPUT/PRODUCT	ANTICIPATED APPLICATIONS
NOTE: The following incremental cycle includes: validation of movement requirements, scheduling of organic and strategic lift, the allocation of requirements to carriers, the reporting of actual carrier movements, and the manifesting of requirements to carriers. Any carrier itinerary changes or diversions will continue until the deployment is complete or the crisis subsides (combined Phases V and VI).				
SPD SPG USTC	Review the TPFDD LOI	Confirm and adjust selected COA force requirements/sustainment requirements and priorities	Adjusted TPFDD	RDA AHQ
SPG, SPD	TPFDD adjusted to LOI	Schedule/allocate organic movements for the first increment of deployment	Scheduled TPFDD	S&M
SPG	TPFDD scheduled	Identify force and sustainment shortfalls	Shortfalls listings	RDA, AHQ Newsgroups
SPD	Review SPG force and sustainment shortfall messages	Validate the first deployment increment (first 7 days of airlift and first 30 days of sealift)	Transportation Pre-edit Report; Validated first deployment increment	RDA PDR
SPD	Validated first deployment increment	Notify the JPEC when the first deployment increment is validated	Validation message	Newsgroups TCCESI
ALL	Receive and review Validation message			Newsgroups
USTC (AMC)	Validated increments will be scheduled	Develop and enter Common-User Air Movement Schedules (7 days)	7 days of air schedules	S&M, GTN ADANS, TCCESI
USTC (MTMC) (MSC)	Validated increments will be scheduled	Develop and enter Common-User Surface Lift schedules (30 days)	30 days of surface schedules	S&M, GTN TCCESI
SPG	Validated increments will be scheduled	Develop and enter organic carrier schedules	Schedules for non-strategic lift legs	S&M

SPD	The SPD converts the COA into an OPORD	Convert the COA and publish an OPORD	Newsgroups OPORD	Newsgroups
ALL	Receive and review OPORD			Newsgroups

Table 7. Mission Tasks, Crisis Action Planning Matrix, Phase VI

Phase VI - Execution Phase VI begins with the decision to execute an Operation Order (OPORD), normally transmitted by a CJCS Execute Order, and continues until the crisis is resolved satisfactorily.				
PARTICIPANT	BACKGROUND ACTION	MISSION TASK	OUTPUT/PRODUCT	ANTICIPATED APPLICATIONS
CJCS	An Execute Order is published and issued directing the supported commander to execute his OPORD; The order directs the deployment/ employment of forces in selected COA	Issue Execute Order	Execute Order	Newsgroups AMHS
ALL	Direct mobilization activities; Coordinate with personnel centers and logistic agencies; Identify and confirm sustainment requisitions	Monitor the initial deployment of forces; Review deployment status of ULNs, UICs and Force Modules	Execution of movement	Newsgroups AHQ RDA S&M PDR
USTC (AMC)		Report Strategic Airlift Arrival and Departures for the first increment of movement (first 7 days)	Airlift movement	S&M
USTC (MTMC) (MSC)		Report Common-User Surface Lift Arrival and Departures for the first increment of movement (first 30 days)	Surface movement	S&M GTN
SPG	Actual arrivals/departures will be reported	Report arrivals and departures of non-strategic carriers	Non-strategic carrier movement reports	S&M

NOTE: The above incremental cycle includes: validation of movement requirements, scheduling of organic and strategic lift, the allocation of requirements to carriers, the reporting of actual carrier movements, and the manifesting of requirements to carriers. Any carrier itinerary changes or diversions will continue until the deployment is complete or the crisis subsides (combined Phases V and VI).				
SPD	JTF Deploys forward	Deploy GCCS forward	All required GCCS functionality usable in an austere comms environment	ALL

Table 8. Additional Mission Tasks

The following mission tasks are not included in the GCCS User Characterization Profile. They need to be inserted into the testing at appropriate places.

PARTICIPANT	BACKGROUND ACTION	MISSION TASK	OUTPUT/PRODUCT	ANTICIPATED APPLICATIONS
EVAC User	Non-combatant personnel need to be evacuated from area of interest (AOI)	Produce and print an evacuation list for country and district of AOI	EVAC report	EVAC
		Produce and print Evacuation Summary for country of AOI	EVAC summary report	EVAC
FRAS User	Fuel requirements must be programmed into planning	Produce and print a fuel resources report	Two FRAS files to process on PC FRAS	FRAS extract PC FRAS
Air Field Planner	Usable airfields must be made known to movement planners	Produce Airfields report for AOI	Airfields report	Airfields
Common Operational Picture Users	Maps for AOI may be viewed as desired, with available tracks for all reported activity	Bring up Common Operational Picture (COP) without filters set	Display of map and tracks (may be very cluttered, depending on amount of message traffic)	COP
		Filter out undesired tracks	Less cluttered display	COP
	Users without COP processing can view a snapshot of COP by using ELVIS (in receive only mode)	This task will require co-located COP and non-COP workstations; Visually verify that the ELVIS picture matches the COP Picture	Active COP picture and ELVIS snapshot agree	COP ELVIS
TARGET users	Additional tools available	Exercise the TARGET functionality	TARGET reports	TARGET

				MATT

Table 8. Additional Mission Tasks (continued)

PARTICIPANT	BACKGROUND ACTION	MISSION TASK	OUTPUT/PRODUCT	ANTICIPATED APPLICATIONS
UB	Air Tasking Orders can be reviewed, segmented, and segments transmitted to components as needed	Receive an ATO	ATO message	UB
		Segment the ATO	Segments of ATO	UB
		Transmit the ATO segments to the components they apply to	Transmitted segments received by components	UB
COP Users	Execution of ATO results in air tracks being reported which will then appear in COP	Verify that during ATO execution, the reported air tracks correlate to the aircraft designated in the ATO	Air tracks in COP match ATO plans	COP
Intelligence System Users	Intelligence mission requires access to resources	Provide an intelligence resources report	Resources report	GRIS
		Produce a request for intelligence support	Intelligence support request	COLISEUM
JDISS Users		Execute the intelligence mission	Intelligence gathering of imagery and sensor data	JDISS
SVC	Service feeder systems must support GCCS with the new operating systems, new DII COE and new Oracle Relational Database Manager	Each service verify that the interfaces still work correctly	Services Interface Files	COMPASS COMPES MAGTF II RUDRS, AMHS Newsgroups, IRC
SVC/remote users	Access to documentation must be verified	Access GCCS homepage and view/ download new documents	Documents on line	Netscape Browser
SVC	Maintenance of and access to Status of Resources and Training (SORTS) must be verified	Each service use access through GSORTS to verify that the service updates to SORTS is being	GSORTS listing of selected service units	GSORTS SORTS

		processed and passed to GSORTS and GCCS users		

Mission Support Tasks. The following table presents examples of Mission Support Tasks. These tasks are primarily for Systems Administrators, Security Administrators, Database Administrators, Functional Database Managers, and Track Database Managers.

Table 9. Mission Support Tasks

PARTICIPANT	BACKGROUND ACTION	MISSION SUPPORT TASK	OUTPUT/PRODUCT	ANTICIPATED APPLICATIONS
System Administrator (SA)	SA is responsible for installing GCCS applications on local site	Determine local site configuration unique settings	List of unique settings, equipment, and application install requirements	Pre-planning
		De-install segments to be replaced	Cleaned out disk space	Command line or INSTALLER
		Install new Solaris	New operating system	INSTALLER
		Install new Desktop/EM server	New EM Server	INSTALLER
		Install new RDBMS (ORACLE)	New RDBMS	INSTALLER
	Establish/update the domain name service	Install the local domain name server	Local DNS Server	INSTALLER
		Update DNS as needed	Updated DNS	DNS Admin
	Establish/update the NIS+ service	Install the local NIS+Server	Local NIS+ Server	Command line, Solaris
		Create NIS+ replicas		Command line, Solaris
		Update NIS+ as needed	Updated NIS+	NIS+ Admin
	Install new segments in proper order	Install new segments in proper order	New segments on system	INSTALLER

PARTICIPANT	BACKGROUND ACTION	MISSION SUPPORT TASK	OUTPUT/PRODUCT	ANTICIPATED APPLICATIONS
	Provide printer support to users	Configure and manage printers for user access	Current printer file printer table	PRINTER Admin
	Users require accounts and permissions to access applications	Provide accounts for database user	DBUSER tables	DBUSER
SA (continued)		Provide user accounts for general access	User account groups	EM
	Users require accounts and permissions to access applications	Set permissions	User permissions	EM
	Software licenses must be available and administered to provide user access to applicable applications	Acquire licenses as required; Provide user access	Usable licensed applications	License Admin
	Provide for configuration management	Apply file and directory listings of all applications	File system management	Command line
	Provide Apply user support	Process Inter-relationship specifications	System Trouble shooting	Command line
	Teleconferencing capabilities must be provided to users	Install teleconferencing applications	Teleconference capabilities	IRC Newsgroups World Wide Web
	Provide mail service	Install mail service	Sendmail application	Command line Solaris

PARTICIPANT	BACKGROUND ACTION	MISSION SUPPORT TASK	OUTPUT/PRODUCT	ANTICIPATED APPLICATIONS
SA and/or Sec Mgr		Maintain mail admin files	Usable mail system	Sendmail
	Provide problem corrections	Halt system operations	All processing stops	
		Reboot system in single user mode	Only root user (SA) can access system	
		Reboot system in normal mode	All authorized users may log in and process applications	
	Provide system backup and recovery services	Perform routine scheduled backups	Backup files on tape or disc	Backup procedures
		When needed, perform system recovery actions	Recovered system; ready to resume processing	Recovery procedures
	Provide GSORTS administration	Provide for GSORTS updated information	Up-to-date GSORTS files	
	Provide security aspects of mission support	Setup and maintain user access accounts	User accounts files	
		Setup and maintain system and user profiles	Profile tables	
		Maintain roles in account groups	Account group roles	
		Provide system audit capabilities	Audit logs	
		Provide password administration	Password controls	
DataBase Administrators (DBA)	Provide reliable database support to authorized users	Establish and maintain authorized database structure	Prescribed databases	Oracle Tools

PARTICIPANT	BACKGROUND ACTION	MISSION SUPPORT TASK	OUTPUT/PRODUCT	ANTICIPATED APPLICATIONS
		Perform database backup	Backup data on storage media	Oracle Tools
		Provide database recovery	Reload data from backup and process files	Oracle Tools
	Provide database maintenance capability	Apply Entity Relationship Model/ Diagram and Data Dictionary	Database Management	Command line
	Provide for alternate database access	Provide for user access and permissions at alternate database sites	User access and permissions files at alternate database site	Oracle Tools
		Provide alternate database access when needed	Remote database access to alternate site	
JOPES Functional Database Manager (FDBM) or Track Database Manager (TDBM) as appropriate	Use the JOPES FDBM or TDBM responsibilities listing as a guide to test and evaluate mission support functions in the following areas:			
	Administrative	Permissions management		
		Teleconferencing (Newsgroups)		
		Installations		
		Backup/Recovery (JOPES Database)		
		Backup/recovery Individual TPFDDs		
		Continuity of Operations Plan (COOP)		
		Admin reporting (management)		
	OPLAN Management	OPLAN initialization		

PARTICIPANT	BACKGROUND ACTION	MISSION SUPPORT TASK	OUTPUT/PRODUCT	ANTICIPATED APPLICATIONS
		OPLAN type/distribution/access		
		OPLAN status		
		OPLAN offload/reload		
		OPLAN deletes		
		Set C-Day/L-Hour		
		Reset C-Day/TCC indicators		
		OPLAN synchronization		
		Reporting (user)		
	Network management/monitoring	Site status		
		Transaction processing/flow (local)		
		Database maintenance and statistics		
		Transaction processing/flow (distributed network)		
		Reporting (transactions)		
	Provide JMCIS administration	Provide for JMCIS channels and JMCIS feeds	Up-to-date JMCIS files	